

LETTERS TO THE EDITOR

HTLV-I and HTLV-II in Africans

Human T-cell lymphotropic virus type I (HTLV-I) is the aetiological agent of adult T-cell leukemia (ATL) and tropical spastic paraparesis/HTLV-associated myelopathy (TSP/HAM). It is endemic in Japan, the Caribbean basin and Africa. Unlike HTLV-I, HTLV-II, a closely related retrovirus, has not been formally linked with any disease and its epidemiology has not been established yet. HTLV-II has been observed in a high prevalence among US and European injecting drug users, and among certain Amerindian tribes. A number of studies have pointed out that HTLV-I is widespread in Africa and HTLV-II is also present but with a lower prevalence in that continent.¹

In a previous report,² we pointed that misdiagnosis of HTLV-II can be frequent using HTLV-I viral lysate screening assays. More recently, Weiss³ noticed this phenomenon testing intravenous drug addicts from New Jersey (USA). In this form, HTLV-II seroprevalence in Africans could be underdiagnosed.

An option to avoid false negative results for HTLV-II infection could be to add either an HTLV-II viral lysate or specific recombinant or synthetic HTLV-II antigens to the previous HTLV-I screening assays. In our own experience in Spain, testing samples from African immigrants with these new tests, we found an unexpected high prevalence of HTLV-II infection. We used two ELISAs, one of which uses specific envelope synthetic peptides from both HTLV-I and HTLV-II (HTLV 1+2 Biokit, Barcelona, Spain), and the other which incorporates synthetic peptides from p19 and gp46 of each virus (HTLV I+II Biochrom, Berlin, Germany). Reactive sera were confirmed by a Western blot (Diagnostic Biotechnology Ltd. HTLV-2.3, Singapore) which incorporates different specific synthetic peptides and recombinant proteins for both HTLV-I and HTLV-II. Testing 540 sera from subjects coming from Central and West African countries, we found two HTLV-I-infected individuals (one from Mali and other from Equatorial Guinea), and 4 HTLV-II asymptomatic carriers, coming from Equatorial Guinea, Liberia, Guinea-Bissau, and Cameroon, respectively. The last one was additionally infected with HIV-2. All HTLV-II carriers but one were men, and none reported intravenous drug addiction practices or blood transfusions. However, all of them reported multiple sexual partners in the past.

Our results support the finding that both HTLV-I and HTLV-II are present in Africa. The relative proportion of each infection needs to be analysed using screening assays showing adequate accuracy for both viruses.

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- 1 Bonis J, Verdier M, Dumas M, Denis F. Low human T cell leukemia virus type II seroprevalence in Africa. *J Infect Dis* 1994;169:225-7.
- 2 Soriano V, Calderon E, Gutiérrez M, Tuset C, Martínez-Zapico R, Gonzalez-Lahoz J, and the HTLV-I/II Spanish Study Group. Misdiagnosis of HTLV-II infection using HTLV-I viral-lysate screening assays. *AIDS* 1993;7:1395.
- 3 Weiss SH. The evolving epidemiology of human T cell lymphotropic virus type II. *J Infect Dis* 1994;169:1080-3.

Use of an inpatient HIV unit by injecting drug users

Injecting drug users are commonly perceived to be difficult to manage on inpatient wards. To investigate this, we examined the case notes of all injecting drug users (IDUs) admitted to the Middlesex Hospital inpatient HIV unit between January 1990 and June 1992, and compared them with randomly selected, non-drug using controls. There were 428 patients admitted, of whom 37 were IDUs, and we selected 37 controls by systematic sampling of the case notes. Data were compared using *t* tests for normally distributed data, and χ^2 (with Yates' correction where appropriate), Fisher's exact test or Wilcoxon's rank sum test for non-normally distributed data.

IDUs (26 males, 11 females) were younger than controls (35 males, 2 females): 32.6, SD 5.7 years vs 37.1, SD 8.1 years, $p = 0.007$. Thirty-one (84%) of the IDU had intravenous drug use as their only risk factor for HIV, the other six being also homosexual men. Thirty-three (89%) of the control group were homosexual men, two were African, one was the heterosexual partner of an HIV positive woman, and for one there was no clear risk factor. Thirteen of the drug users were receiving opiates on a legal prescription, 13 were using non-prescribed opiates and 11 were former drug users. Seven of the IDUs were noted to have significant alcohol problems, compared with none of the control group: this may have been an artefact of recording. Eleven (30%) of the IDUs were without permanent housing, compared with two of the control group ($\chi^2 = 5.97$, $p = 0.014$).

There was no difference in the number of admissions per patient during the study period (2.2, SD 1.6 for IDUs, 2.4, SD 1.4 for